DOCKET NO. IB-1330C

REMARKS

The "Notice to File Corrected Application Papers" indicates that the sole objection of the USPTO to this application is that the originally submitted Abstract (from parent application Serial No. 09/259,982, which was filed on March 1, 1999) exceeds the currently mandated length of 150 words. A substitute Abstract, which meets these requirements, is hereby submitted.

If the Examiner in charge of this case feels that there are any remaining unresolved issues in this case, the Examiner is urged to call the undersigned attorney at the below listed telephone number which is in the Pacific Coast Time Zone.

Respectfully Submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

The Abstract, beginning at line 1 of page 72, has been amended as follows:

A semiconductor nanocrystal compound and probe are ~~is~~ described. The compound ~~which~~ is capable of linking to one or more affinity molecules. The compound comprises (1) one or more semiconductor nanocrystals capable of, in response to exposure to a first energy, providing a second energy, and (2) one or more linking agents, having a first portion linked to the one or more semiconductor nanocrystals and a second portion capable of linking to one or more affinity molecules. One or more ~~of these~~ semiconductor nanocrystal compounds are linked to one or more affinity molecules to form a semiconductor nanocrystal probe capable of bonding with one or more detectable substances in a material being analyzed, and capable of, in response to exposure to a first energy, providing a second energy. ~~In one embodiment, the probe is capable of emitting electromagnetic radiation in a narrow wavelength band and/or absorbing, scattering, or diffracting energy when excited by an electromagnetic radiation source (of narrow or broad bandwidth) or a particle beam. The probe is stable to repeated exposure to energy in the presence of oxygen and/or other radicals.~~

~~Treatment of a material with the semiconductor nanocrystal probe, and subsequent exposure of this treated material to a first energy, to determine the presence of the detectable substance within the material bonded to the probe, will excite the semiconductor nanocrystal in the probe bonded to the detectable substance, causing the probe to provide a second energy signifying the presence, in the material, of the detectable substance bonded to the semiconductor nanocrystal probe. In one embodiment, the semiconductor nanocrystals in the probe are excitable over a broad bandwidth of energy, and emit electromagnetic radiation over a narrow bandwidth, making it possible to use a single energy source to simultaneously excite a plurality of such probes, each~~

~~emitting electromagnetic radiation of a differing wavelength band to simultaneously analyze for a plurality of detectable substances in a material being analyzed.~~

Also described are processes for respectively: making the semiconductor nanocrystal compound; making ~~and~~ the semiconductor nanocrystal probe; and . ~~Processes are also described for~~ treating materials with the probe~~, for example, to determine the presence of a detectable substance in the material bonded to the probe~~.